



Newsletter for Landcare and Dunecare in Byron Shire

<http://www.brunswickvalleylandcare.org.au/>

Connect on facebook

August 2016

- AUGUST**
 - 13 Tree Planting at Broken Head
 - 14 Riparian Zone and Erosion Management Field Day
 - 27 Intrepid Landcare Day
- SEPTEMBER**
 - 2 Wildlife Connections Field Day
 - 21 – 22 National Landcare Conference

Forest without Planting Field Day

by Alison Ratcliffe

Our field day on the weekend saw 21 people turn out on a fairly cold cloudy day to visit the property of Chris Best and Lorrelei Drapes. The regeneration trial site has received a variety of treatments over the last 2 years



including fire, herbicide, rotary hoeing and scraping. So which plots do you think had the most regeneration? The results definitely surprised us! The scraped plots had by far the best regeneration. This provides a great new,



comparatively low cost, technique that we can use to regenerate ex-grazing land adjacent to existing eucalypt forests.

We also looked at some established 2 year old plantings and an area of melaleuca forest that has undergone assisted regeneration for the past 5 years. It was a fascinating field day enjoyed by all who attended.



The experimental trial at Tyagarah is a Brunswick Valley Landcare project funded through the Bjarne K Dahl Trust in partnership with Koala Connections. The workshop is supported by the Community Capacity Support project funded through

Local Land Services.



**Invitation to Tree Planting
NSW Environmental Trust
Broken Head Coastal Corridor Restoration Project**



The Broken Head Coastal Corridor Restoration Project includes a Swamp Sclerophyll-Rainforest planting of 1200 trees across a previously Setaria dominated floodplain to link two areas of mature forest. The landholders have prepared the site in readiness for the August planting.

When: Saturday 13 August 2016

Time: 10 am to 2 pm

Where: Meet at the entrance to Broken Ridge

591 Broken Head Road

Morning tea provided

Further details contact: Annette annetelmckinley@gmail.com or Bob bobjes@mullum.com.au Phone 0447898097

Riparian Zone and Erosion Management

SUNDAY 14TH Field Day AUGUST 2016



HEALTHY CATCHMENTS = QUALITY WATER

Come along to a Riparian Zone and Erosion Management Field Day at a private property bordering Coopers Creek to learn practical ways to:

- use riparian vegetation to effectively manage erosion and increase productivity
- create buffer zones between agricultural activity and waterways
- improve the condition of waterway frontages with vegetation.

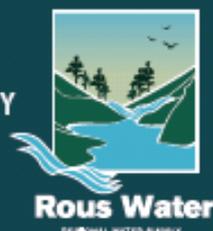
Lack of vegetation both along waterways and across our drinking water catchment can lead to excessive runoff, stream bank erosion, greater impacts from catchment land uses, decline in important wildlife habitat, reduced water quality and damage to in-stream ecosystems. This affects river health and drinking water quality by introducing pathogens, nutrients, sediments and chemicals.

Presented by: Rous Water and Brunswick Valley Landcare
In association with: Riparian Management Services

SUNDAY 14TH AUGUST | 9:30AM TO 1PM | GOONENGERRY
BOOKINGS ESSENTIAL – FREE

Alison Ratcliffe | 6626 7028 | alison.ratcliffe@byron.nsw.gov.au

MORNING TEA & LUNCH PROVIDED





Sustainable grazing field day

All welcome

Come and hear from the experts and learn about the outcomes of an 18-month sustainable grazing project funded by the NSW Environmental Trust.

THURSDAY
25 AUGUST 2016
10AM – 2PM
CHILLINGHAM HALL,
CHILLINGHAM

Speakers include:

Dave Forrest, Biological farming educator and consultant, advice on *Supporting managed grazing with soil mineral and biological inputs.*

Nathan Jennings, Senior Livestock Officer, North Coast Local Land Services, talking on *Pasture, genetics, weaning and reproduction aspects from the Grazing BMP Animal Production Module.*

Dr Judi Earl, AIMS Consultancy and Holistic Management™ educator, will speak about *Principles of good pasture management and experiences putting change into practice*

Eli Szandala, Program Leader – Sustainable Agriculture, Tweed Shire Council, talking about *Council's support programs and opportunities*

Sustainable grazing program participants will share their experiences in the program and what they have learnt.

Lunch and refreshments provided.

Please RSVP to Tweed Shire Council by COB Tuesday 23 August 2016 on (02) 6670 2599 or eszandala@tweed.nsw.gov.au



Local Land Services
North Coast



TWEED
SHIRE COUNCIL

Weeds AND Waves

Brunswick Heads Landcare ADVENTURE

27 August 2016 10am-4:30pm

Brunswick beach-side location

RSPV ESSENTIAL

Alison.Ratcliffe@byron.nsw.gov.au

Free Event
For 18-30yo's

Get into nature Meet awesome people Have fun
Grab a feed Plant trees Pull Weeds Cruise the
river Learn about the dunes Be the change
Find out about Intrepid Landcare: the new
National network for young Australians
www.brunswickvalleylandcare.org.au





Farm Co-operatives & Collaboration

Pilot Program

29th Forum
AUGUST
30th Tours

Mantra on Salt Beach
Kingscliff NSW

Invitation National Forum

The Farm Co-operatives and Collaboration Pilot Program is a Commonwealth Government investment of \$14.9 million to provide farmers with knowledge and materials on co-operatives, collective bargaining and other forms of collaboration in the agriculture sector. The grant funding for delivery of the Program has been provided to Southern Cross University. Join us for the inaugural Forum and the launch of the Program.

Learn, share and be inspired

Monday 9 am - 7 pm	Keynote address	Challenges, Dynamics and Benefits of Collective Activity Jack Wilkinson		
	Major topics	Business Models and Governance Getting the Structure right	The Power of Collective Marketing Showcases	
		Benefits and Challenges of Collective Bargaining Showcases	Managing Supply Chain Logistics Showcases	
	Knowledge Intensives	Capital Raising Legalities	Control your Financial Future Accounting	Foundations of Directorship Governance
Round Tables	Negotiation & Group Dynamics	Collaborative E-Commerce	Cross Cultural Market Penetration	
	Northern Rivers Cooperative Alliance Case Study	How Family Farmers can Leverage Supply Chain Efficiency	Creating a National Operating Environment	
Tuesday 8 am - 1 pm	Networking	Networking Opportunities Meet the Speakers		Pathways for Entering the Program Meet the FCCPP Delivery Team
	Optional Tours	Tour 1 Norco Co-operative Limited Gold Coast	Tour 2 Norco Co-operative Limited Lismore	Tour 3 Macadamia Processing Co Limited Lismore

Keynote Speaker: Jack Wilkinson



During the last decade the power of the Co-operative has delivered much to rural Canada. Learn of the resurgence of this model and the benefits being accrued to individual Co-operative members.

Jack will share first hand experience in working with farmers, government and agribusiness and in designing numerous programs that have stood the test of time.

This presentation will show how to dramatically enhance and strengthen the farmer's economic position ensuring a better and more stable income for farm families.

About

Watch





Wildlife Connections

Free Field Day



Come along to a free practical field day focussing on three projects aimed at protecting, enhancing and restoring biodiversity and wildlife corridors within Byron Shire. The day will help you to manage our amazing biodiversity on your property.

- Bush Connect “*Restoration and Linkage of Wilsons and Coopers Creeks*”. A consortium made up of Goonengerry Landcare, Wilsons Creek / Huonbrook Landcare, and Byrangerry Grass Reserve Trust have joined forces with a common goal of restoring over 120 hectares of degraded bushland.
- Environmental Trust “*Restoring Rainforest in a Biodiversity Hotspot*”. A 3 year project managed by Byron Shire Council restoring 11 hectares of bushland on Land for Wildlife properties.
- Land for Wildlife – Brunswick Valley Landcare are the regional provider in Byron Shire.

Friday 2nd September 2016 10:00 am – 1:00 pm Wilsons Creek

(15 mins from Mullum with good access)

PROGRAM AND GUEST SPEAKERS:

Stuart McDonald and Julie Gardner - a walk through an old, new and unworked Camphor Laurel regeneration site will look at new techniques and explain the importance and intricacies of restoring this degraded vegetation to rainforest.

Alan Goldstein , Goonengerry Landcare Inc - “*Restoration and Linkage of Wilsons and Coopers Creeks*”.

Stephen Hardy, Environmental Trust – an overview of the Bush Connect Project and the Environmental Trust.

Mark Fitzgerald - attracting wildlife to your property and wildlife corridors.

Brunswick Valley Landcare - an update on the Land for Wildlife program in Byron Shire.

Sandy Pimm, Byron Shire Council – BioBanking: Biodiversity Banking and Offsets Scheme

Lunch will then be provided over a Q&A session.

A variety of nest boxes will be on display and Hollow Log Homes will be there to answer you questions about different types of boxes for birds, bats and arboreal mammals. There will also be a demonstration of how and where to install them. Byron Council also has a number of nest boxes to give away to interested landholders.

Bookings are essential please contact: Alison Ratcliffe alison.ratcliffe@byron.nsw.gov.au 6626 7028



This project has been assisted by the New South Wales Government through its Environmental Trust.





**SUSTAINABLE
HOUSE DAY
2016**

**SUSTAINABLE HOUSE DAY
NORTHERN RIVERS**

Byron	Lismore
Tweed	Ballina

Tiny Homes Design Competition - NOW OPEN

ENTER HERE: www.sustainablehousedaynr.org

Exhibited across the region in Byron, Lismore, Tweed and Ballina
 Entries close: Thursday, 1 September

CATEGORIES:

PROFESSIONAL

- First Prize: \$1000 cash prize plus 1-year display at the Green Building Centre (worth \$1000)
- Second Prize: \$300

Prizes courtesy of Koho

COMMUNITY

- Byron: \$500
- Tweed: \$500
- Lismore: \$500
- Ballina: \$500

PEOPLE'S CHOICE AWARD

- \$100 cash

YOUNG PEOPLE

16 YEARS AND UNDER

- First Prize: \$200
- Second and Third Prize: \$50 each

Prizes courtesy of Summerland Credit Union

For more information email sustainablehousedaynr@gmail.com



Science Walks : Science Talks - White Coats on for Water Science

Science Walks/Science Talks is proud to present White Coats on for Water Science as part of National Science Week. Bend a pencil! Make music with water! Create a magic star! Sip water with a mega straw. Pop into Ballina Fair for a Science Popup Event with Dorroughby Environmental Education Centre.



When: Saturday, August 13 2016. 10:30 AM to 1:30 PM

Where: Ballina Fair, 84 Kerr Street, Ballina, NSW, 2478

Topic: Environment and nature

Cost: Free

*** FREE FUN FOR THE WHOLE FAMILY ***

[Find out more here](#) or join the [Facebook event](#). to learn more about collaborative approaches to farming and importantly, how to get involved in the SCU Farm Co-operatives and Collaboration Pilot.

National Biological Farming Conference: Earlybird Rego Closing!

Only 7 days left for Early Bird Registration for the National Biological Farming Conference in Cairns!

\$225 through August 7 ~ \$350 from August 8

The National Biological Farming Conference and Expo: Pay Dirt focusses attention on enhancing soil biodiversity for improved productivity and profit and long term environmental and farm sustainability.

41 Speakers & Counting

Farmers ~ Researchers ~ Educators

[Visit the conference website](#) or [book here](#) .Program.[Read more...](#)



Subtropical Rainforest Plantation Field Day

Timber Production on Small Farms for Best Social, Environmental and Economic Outcomes. Topics for the Day – Harvest to Market and Potential Carbon Offsets.

Carol Neal, Specialty Timber Growers Group (STG) - Introduction

Dr Joe-Harvey Jones – motivation for planting trees and ‘where to next?’

Darryl Collins: STG member & timber merchant - Harvesting to marketing

Dr Kevin Glencross (SCU) – Biomass studies and potential for carbon offsets

Alison Dillon - Forester, Dr Joe Harvey-Jones & Dr Kevin Glencross – economics of farm forestry and wood production

137 Taylors Rd, Eureka, NSW **Saturday 10 September Times: 10.00am – 1.30pm**

\$10 per person (includes morning tea and field notes - BYO lunch)

Please RSVP by 3 September 2016 to Joe Harvey-Jones on 02 6688 4257

or joeharveyjones@hotmail.com



WHO SHOULD ATTEND?

All players along the food supply chain interested in local food and the opportunities:

- Farmers, local producers, food wholesalers, manufacturers and retailers,
- Restaurant, cafes and hospitality sector
- Transport, distribution, storage, packing companies
- Elected representatives
- Tourism and Events operators
- Agricultural and Planning sector
- Economic Development sector
- Community and Cultural Development representatives
- Students

FORUM PACKAGE

Forum two-day Registration \$250 per delegate includes:

- Site tour transportation costs
- Morning and afternoon tea and lunch on both days of conference
- Presentation packs
- Access to all speaker sessions

Forum Dinner - Friday 12 August, 6.30pm (optional) - \$110 per delegate

Local Food and Wine Trail Dinner showcasing local produce

- 5 course degustation with wine and beer matching.

The Forum Dinner created by renowned Seasons Executive Chef, Craig Robertson and team, and will be held at Peppers SALT

REGISTER NOW ONLINE www.tweed.nsw.gov.au/FoodForThought

ACCOMMODATION PACKAGES

SALT is located half an hour north of Byron Bay and half an hour south of the Gold Coast Airport (Coolangatta), through the cane fields of northern New South Wales to the Tweed Coast and is a unique conference and event destination.

SALT has a tropical air and a modern Australian feel. Its resorts, with lagoon and tropical pools and two pillarless ballroom surround a coastal village at the edge of an unspoilt beach. Within the village are six distinctive restaurants and bars, including the renowned Season.

Discounted accommodation packages at either Mantra or Peppers Resorts can be arranged by phoning Reservations on 1800 811 454 or (02) 6670 5000 and quoting "Food for Thought" Forum.

Supporting the Forum



FOOD FOR THOUGHT FORUM

Feeding the appetite for regional collaborations

11 - 12 August 2016

Mantra on Salt Beach, Kingscliff

Tweed Shire Council is proud to present this forum, bringing together a range of stakeholders along the food supply chain. The forum will recognise existing local and regional food initiatives and identify opportunities and potential areas for investment.

Eating, more than any other single experience brings us into a full relationship with the natural world. This act itself calls forth the full embodiment of our senses; taste, smell, touch, hearing and sight. We know nature largely by the various ways we consume it. Eating establishes the most primordial of all human bonds with the environment..... it is the bridge that connects cultural with nature

(Rifkin 1992: 234) Stefan Goelling and Michael Kay
The Routledge Handbook of Tourism and Sustainability

INTRODUCTION

Northern New South Wales and South-East Queensland are home to some of the greatest food industry opportunities in the country. The area's natural environment and landscape, climate, transportation access, increasing population, growing economies and internationally recognised tourism destinations offer an amazing platform for food production and associated industries.

PURPOSE

To ensure our region is making the most of the opportunities we have on offer, Tweed Shire Council will be hosting a regional event utilising local, national and international expertise. The purpose of this event is to:

- Share lessons learnt from local food initiatives
- Showcase local food success stories from Queensland, New South Wales and Victoria
- Explore possibilities on a way forward to boost the local food economy
- Showcase local food, agricultural industries, food tourism and sustainable economic and community initiatives.



<http://www.tweed.nsw.gov.au/FoodForThought>

Bushfire 2016: Connecting Science, People & Practice University of Queensland, St Lucia, Brisbane 28 - 30 September 2016

Bushfire 2016 will be an engaging, informative and inspiring conference squarely aimed at connecting fire scientists, ecologists and students with onground fire operators, public land managers, land managers (e.g. natural resources, weed/pest, biodiversity), utility operators, planners and other fire and environmental professionals.

Bushfire 2016 offers two days of concurrent sessions set in the beautiful grounds of the University of Queensland, with a catered poster session on the Wednesday evening. With further events and field trips to be announced we encourage you to join our mailing list to ensure you receive updates and alerts.

Places are limited and based on enquiries to date we expect to see a great deal of interest when registrations open soon.

<http://www.fireandbiodiversity.org.au/bushfire-home>



Big Scrub Day Wants You!



Musicians Wanted

For an acoustic set
@ Big Scrub Day on October 16th!

If you would like a chance to play an open-air set under the camphors at Rocky Creek Dam for Big Scrub Landcare's massive feature event, contact Hannah! Some \$\$ available, so get in quick!
landcare.support@richmondlandcare.org

18TH ANNUAL
Big Scrub Rainforest Day
Sunday 16 October 2016
ROCKY CREEK DAM

PRESENTED BY BIG SCRUB LANDCARE | ORGANISED IN ASSOCIATION WITH ROUS WATER, RAINFOREST TRUST AUSTRALIA & ENVITE
Further information available at www.bigscrubrainforest.org.au

Volunteers and stall holders are also invited to visit https://bigscrubrainforest.org.au/?page_id=3804



FREE & 1/2 PRICE 'Stories On Foot' tours for Byron vullies

In order to give back to all the generous volunteers in our community, as well as help to get the word out about my story tours, I am offering **ONE FREE town walk** and **TWO HALF PRICE foreshore tours** to Byron Shire volunteers.

If you are a volunteer, take advantage of my August offer. Call or text me your name, the date you'd like to come and who you volunteer with. **CALL: [0403 328 643](tel:0403328643)** LIMITED places! Bookings close soon.

DETAILS & Testimonials: <http://www.storiesonfoot.com>

<https://www.youtube.com/watch?v=DqTUy0mlFlc>

Check out all my other local story events at my [calendar page](#).

Voting Open: National Landcare Awards

There are 69 outstanding Landcare champions across nine categories that make up this year's National Landcare Awards finalists. All finalists are also in the running to win the People's Choice Award. The People's Choice Award winner will be presented to the finalist who receives the most votes from the general public in the lead-up to the 2016 National Landcare Awards, which take place in Melbourne on Thursday, 22 September. There are some great stories to inspire you.



Dr Tony Parkes is one of the nominations. Tony's dedication to restoring critically endangered lowland rainforest started 25 years ago when he moved to a degraded 42ha ex-dairy farm near Bangalow in NE NSW. The farm was once part of the Big Scrub, the largest area of lowland subtropical rainforest in Australia. Over 99% of the Big Scrub has been cleared, leaving 60 significant remnants with incredibly rich and endangered biodiversity. Tony Parkes and his team have restored rainforest on 14 hectares of his property by rehabilitating three small rainforest remnants and planting 35,000 rainforest trees. A founding member of Big Scrub in 1992, Tony has been president since 1993. [Cast your vote here](#)

Big Data in Agriculture - what is it? What is the potential and what are the pitfalls? Your chance to have your say.

Gina Wood, a PhD researcher at the School of Law in the University of New England, is running a survey "**Big Data in Primary Production - What Do Farmers Know and Not Know, Do and Not Do, Concerning Farm Data in Australia?**" to find out what farmers think about Big Data and related technologies - is it a powerful tool to help farmers or more empty promises and hyped-up words? A means to improve productivity or a step towards dependency on suppliers? A way to make better decisions on farm or a loss of control? Make sure you participate in this [anonymous online 15-minute questionnaire](#) whether you are familiar with "Big Data" or know nothing about it. Your answers are vital in helping to determine how Big Data and its associated technologies can be best put to use for the benefit of primary producers in Australia.

Ms Wood will use the survey answers to quantify the level of understanding and use of Big Data in primary production amongst farmers. Participants must be over 18 years old, proficient in written English (no translation is available), and the owner or farm manager of an operation with at least 50% of revenues from primary production in any primary production sector (e.g. not B&B or farm-stay). No understanding of Big Data is necessary to complete the survey. (UNE Ethics Committee Approval #HE16-125, valid to 06/06/2017).

http://uneprofessions.az1.qualtrics.com/SE/?SID=SV_6m9ENEZVD2evLQV).

BoM online training in interpreting outlook maps

BoM is offering free online training in interpreting monthly and seasonal outlooks for use in decision-making. The lesson uses Wagga Wagga and Merredin WA examples to explore how Australia's main climate drivers can affect outlook maps and confidence in the outlook.

https://www.meted.ucar.edu/training_module.php?id=1247#.V57JUvi9672

Soil inoculations hasten land restoration

A Netherlands trial found covering degraded land with a soil layer less than one centimetre-thick greatly speeded up restoration. The trial used grassland and heathland soils and added the same mix of grassland and heathland seeds to each plot. The inoculations changed both the abundance and the kind of bacteria, fungi and worms living in the soil, making them more like those of the donor ecosystem.

<https://www.newscientist.com/article/2096740-soil-organisms-alone-can-determine-which-plants-grow-where/>

Climate Change and Me



Southern Cross University are offering a unique opportunity to all NSW northern rivers schools to implement the Climate Change + Me Curriculum (as much or as little as suits your students). The curriculum is child-centred and was written by local teachers and young people with the support of university academics.

The curriculum incorporates over 100 children and young people's climate change research undertaken between 2014-2015. The full curriculum is available for download [here](#).

We provide support throughout the implementation along with free resources. We will also be hosting a Climate Change Conference for children and young people on **12 October** at Southern Cross University, Lismore Campus.

So far we have had a fantastic response to the curriculum in primary and secondary schools in the region with many teachers and students describing it as *"the most empowering climate change education curriculum they've ever implemented"*.

If you would like to partake in the curriculum implementation (in any way you like) in Term 3 or 4, please contact Professor Amy Cutter-Mackenzie on 0418 801 893 or by email acutterm@scu.edu.au.

Drop off Household Problem Wastes for FREE

Did you know that household problem wastes such as paints, gas bottles, fluoro bulbs, batteries and oils can do harm if placed in your household kerbside bins? Well now you can drop off these items for free at Byron's new Community Recycling Centres (CRC), where they will be recycled or disposed of safely.



The CRC is located at Byron Resource Recovery Centre, **115 The Manse Rd, Myocum** and is open **Monday-Friday 8am-4pm, and Saturday-Sunday 8:30am-11:30am**.

Karen Rudkin, CRC Project Officer with North East Waste (NEW), said "the Byron CRC is part of a network of 8 centres across the north coast region, for which NEW secured funding, awarded by the Environmental Trust in partnership with the NSW Environment Protection Authority (EPA)".

To find out more about your CRC contact Council on (02) 6684 1870 or visit www.newaste.org.au and follow the link to 'Recycling Centres'.

Street trees provide \$1 billion in services

US research values the services provided by California's street trees at \$1 billion per year. They clean up atmospheric pollution, conserve rainwater, help communities to economise on air conditioning, boost property values, and soak up more than 560,000 tons of carbon dioxide from traffic exhausts every year. Every \$1 spent on planting or maintaining a street tree returns, on average, \$5.82 in benefits.

<http://climatenewsnetwork.net/california-trees-have-1bn-street-value/>

Australia's role in feeding the world

Subtitled 'The future of Australian agriculture', this new book draws together the latest intelligence on the sustainable production and distribution of food and other products from Australian farms. It examines questions that policy-makers, farmers, politicians, agricultural scientists and the general public are asking about the potential productivity of our arable land, the environmental and economic impacts of seeking to increase productivity, and the value of becoming cleaner and greener in our agricultural output. <http://www.publish.csiro.au/pid/7544.htm>

Sustainability of current government policies

The Australian and NSW governments have recently released five year inter-generational reports on the long-term sustainability of current government policies. The Australian Government report says more can be done to maintain the productive capacity of pastoral and agricultural land for future generations and to conserve Australia's unique biodiversity. 14 Responsibilities for environmental regulation will be consolidated and roles for federal, state and local governments will be clearer to ensure that issues do not fall through gaps, and to maintain high environmental standards.

<http://www.treasury.nsw.gov.au/intergenerational-report>

Factors influencing effectiveness of landholder incentives

Factors influencing effectiveness of incentives include availability of inexpensive maintenance or long-term funding, ease of maintenance, need for structural changes, flexibility of land use, and observability of environmental benefits. Successful programs provide extension support, build relationships and trust, are flexible, involve landholders, and offer contract times appropriate for the complexity of the NRM practice. There is a clear need for increased monitoring and evaluation to understand long-term impacts and effectiveness. <https://journal.anzsog.edu.au/publications/36/EvidenceBase2016Issue2Version1.pdf>

Foraging and Habitat Ecology of the Yellow-tailed Black-Cockatoo

You may have seen them slowly flapping in small to large flocks, or heard their distinctive, loud call around Sydney. But what do we know about the Yellow-tailed Black-Cockatoo?



There are six species of Black Cockatoo endemic to Australia. The Yellow-tailed Black-Cockatoo is one of the largest species, and found from Central/South Eastern Queensland down to the Eyre Peninsula in South Australia. In recent years, there has been a significant decline in Yellow-tailed Black-Cockatoo numbers on the East Coast. Moreover, birds have begun to inhabit urbanised areas and forage on introduced pines. Around Sydney, Yellow-tailed Black-Cockatoos forage in bushland, parks and golf courses on pine cones and a range of native plants, including Banksia cones.

It is unclear whether such responses are adaptive or reflect resilience to habitat alteration. While some data are available, very little is known about the movements of Yellow-tailed Black-Cockatoos and the mechanisms driving their behaviour.

This study will investigate Yellow-tailed Black-Cockatoo movements around the Sydney region, using GPS tracking technology. Additionally, diets will be investigated using isotopic analysis, given the probable importance of different types of foraging resources which drive the species' distribution. We will record where and how the birds forage and roost.

This information is important for the long-term conservation of the Yellow-tailed Black-Cockatoo population.

How you can help:

There are few records of the natural history of Yellow-tailed Black-Cockatoos. Further, locations of populations, particularly in New South Wales, remain limited. If you have seen a bird or flock, or have any information relevant to this project, please help us by filling out the [survey here](#)

STORIES to inspire and give you hope

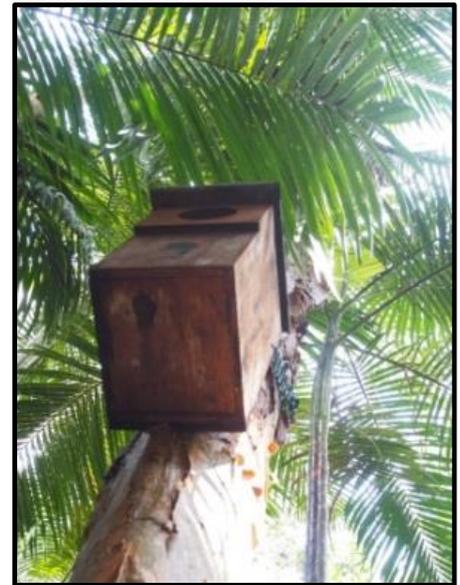
Biodiversity by Alison Ratcliffe

At Renew Fest on the 18th June BVL ran a competition to win a nest box. You were asked to write a few words on what biodiversity was. We had over 50 entries and the lucky winner is Jacqueline Garland with the following words:

“Biodiversity is life, interconnected and interdependent. It is all of us, human, animal, bird, reptile, tree, plant, soil, water - ocean, river, pond, wetland, our Earth/Ocean planet. Without it we would all wither and die....”



Jacqueline lives in an apartment so has kindly donated the nest box to the local Dunecare group to put up in a public space in Brunswick Heads. Thank you Jacqueline for your generosity.



Buffering the bumps – the benefits of riparian zones in floods by rivers of carbon

Water is not the enemy, it is water velocity (speed) that causes the damage. Australian rivers are meant to be rough and bumpy and riparian vegetation can provide

protection from flood impacts along with individual and cumulative benefits to landholders up and down stream.

Healthy, intact riparian zones are great for fish, and often the task of restoring our degraded river edges places fish managers at odds with land managers. Recent research following the South East Queensland floods of 2013 however, shows that a good riparian zone is not only good for fish, but extremely valuable for farmers.

The Condamine has experienced five large flood events in recent years causing localised and widespread flood damage. The 2013 flood event was so severe that a flood recovery program to aid agricultural recovery was funded by the Queensland and Australian Governments through the natural disaster relief and recovery arrangements. The program aimed to restore productivity and build resilience against future extreme weather events. Greg Ringwood outlines the experiences and findings from the Glengallan and Swan Creeks Ex-cyclone Oswald Flood Recovery Program.

<http://riversofcarbon.org.au/rivers-of-carbon/buffering-the-bumps-the-benefits-of-riparian-zones-in-floods/>



Caring for the rare Byron Bay Clay Heath at Clarkes Beach

Ecological restoration work is underway in the rare Byron Bay Graminoid Clay Heath adjoining Clarkes Beach Caravan Park.



The works include removal of weeds, removal of non-native and native trees and selected site burns.

Byron Shire Council's appointed project officer and ecologist Andy Baker said the Byron Clay Heath is a rare plant community found in only a two locations in Byron and Tweed Shires and provides unique habitat to a range of threatened flora and fauna.

"Less than 5% of the heathland remains and it is now listed as an Endangered Ecological Community in NSW. It is also a significant cultural landscape for the Bundjalung of Byron Bay Arakwal People who used fire to maintain the heathland as a vital source of bush foods including edible tubers," he said.

Why does it need restoration?

Clay Heath remnants are threatened by environmental weeds, fragmentation and stormwater pollution. However, the biggest threat to the heathland's future is the lack of fire over recent decades.

Mr Baker said nearly all heath plants need fire to reproduce. "Without fire many species are at risk of local extinction. Plus fire also allows weed and native trees to spread into the heath, causing the rapid loss of all heathland plants under the shady forest canopy. Without restoration, all Clay Heath is likely to be lost by 2040".

The Department of Environment, Climate Change and Water (DECCW) list tree encroachment as one of the main threats to clay heath.

How will the project help the Clay Heath?

Byron Shire Council's manager of environmental and economic Planning, Sharyn French, said the ecological restoration work is already underway and guided by a detailed management plan that aims to restore the Clay Heath and the natural processes it relies on to survive.

The aim of the plan is to restore the structure, function, dynamics and integrity of the clay heath vegetation and the habitats they support.

Council's acting Natural Environment Policy and Projects Officer, **Greg** Shanahan said the project involves:



Eradication of environmental weeds such as Camphor Laurel, Bitou Bush, Winter Senna, Singapore Daisy and Molasses Grass.

Undertaking ecological burns at selected sites. Some sites have already had successful ecological burns in 2008, 2009 and 2015 with the help of NSW Fire & Rescue and the NSW Rural Fire Service. Council plans to undertake additional controlled burns on other sites in the future.

Control of trees displacing the clay heath. Some weed and native trees shading out the Clay Heath are being removed or killed in-situ. This is being carried out in a targeted manner to secure core areas of clay heath vegetation where the opportunity to undertake burns is restricted.

The work is being undertaken as part of the Byron Clay Heath restoration project with funding from the NSW Environmental Trust.

Biodiversity and Climate Change Virtual Laboratory

The Biodiversity and Climate Change Virtual Laboratory (BCCVL) is a “one stop modelling shop” that simplifies the process of biodiversity-climate change modelling. Its mission is to connect the research community to Australia’s national computation infrastructure by integrating a suite of tools in a coherent online environment where researchers can access data and perform data analysis and modelling.

Previously, the lines of inquiry into biodiversity and climate change impacts were stymied due to researchers inability to access a standardised set of tools for analysis and requisite data sources, and computational limitations.

The goal of the BCCVL is to integrate these tools and datasets with high-performance computers and major data storage facilities, thereby enabling more efficient investigation of biological systems and facilitating the development of additional research trajectories currently not possible due to computational limitations.

The BCCVL is supported by the National eResearch Tools and Resources Project (NeCTAR), an initiative of the Commonwealth being conducted as part of the Super Science Initiative and financed from the Education Investment Fund, Department of Industry, Innovation, Science, Research and Tertiary Education. The University of Melbourne is the lead agent for the delivery of the NeCTAR project and Griffith University is the sub-contractor. <http://www.bccvl.org.au/>

Land for Wildlife – Antechinus by Backyard buddies

This little buddy often suffers from a case of mistaken identity, and this confusion can prove dangerous for them. The antechinus is very similar in appearance to the introduced House Mouse, which many people are not keen on.



Distribution map of the antechinus.

Unlike the House Mouse, which can spread disease, eat through farmers' crops and out-compete for resources with native animals, the antechinus is a great neighbour to have.

There are ten species of antechinus in Australia however they all have very similar features. Here are some characteristics to help you tell them apart from mice:

Antechinus will grow to between 70-140 mm (slightly longer than House Mice). It has four pairs of small sharp front teeth and its head is long and pointed with bulging eyes.

The ears of the antechinus are large, thin and crinkly with a notch at the edge.

You're more likely to see them hopping than mice and rats.

Its hair is short and they range in colour from grey to light brown to black, depending on the species.

Its whiskers are very prominent and together with its pointed head, they somewhat resemble a shrew.

Females have a large, open pouch full of babies clinging on in early spring whereas mice keep their litter in a nest.



Antechinus prefer to hang out in forests, taking shelter in round nests in logs and crevices. Most species of antechinus nest in communal groups.

Sometimes, they can be found inside houses near bush areas and farms, but they are rarely seen in urban areas.

The antechinus is a good eater and will take care of beetles, spiders, amphipods and cockroaches for you. They will also occasionally snack on some small berries.

Mating is triggered by the change in the length of days. The shorter days in winter are the signal to the antechinus to start mating. So during July and August these buddies will be much more active and you will have a great chance of spotting them.

Breeding season is no easy task for the antechinus, as it is a stressful, frenzied time of brutal competition. A female's litter often has multiple paternities, which means there are several different fathers of the offspring. This is a great way for the antechinus to keep its gene pool healthy.

All antechinus populations breed at the same time, with around 70% even giving birth on the same day. However, fertilization does not take place immediately, as the female is able to store sperm for up to two weeks in her oviducts. It is only the sperm from the strongest males that will go on to fertilization.



Breeding lasts for two weeks and males will usually die after their first season, as it is so stressful and exhausting. The females can live for up to three years, but this is quite unusual, as they usually die after weaning their first litter. The number in the litter depends on the number of teats on the female, which differs depending on the species. It is usually four but it can be up to 10 in some populations.

The baby antechinus are among the smallest Australian native animal babies, weighing only around 4 grams.

Download your free [Antechinus Factsheet](#) to find out how to encourage antechinus in your area.

TIP

To encourage the helpful antechinus into your garden, create a nice habitat for them to live in. They like to eat insects so a layer of mulch will bring their food in. They also love hollow logs so don't move any from your garden and if you see some being thrown away by neighbours or sold as firewood, they could make a great addition to your garden as habitat for local antechinus buddies. A pond is also great for providing water to the antechinus. Another useful thing to know is that antechinus scats are usually black, rough and with pointed ends. Common mice have brown/black scats with rounded cigar shaped ends.

DID YOU KNOW?

The antechinus have a rather impressive way of guarding their mate during breeding season. They do this by protracting copulation, which means that it can last for up to 12 hours. To maximize energy, they strip their body of proteins and suppress their immune system. No wonder they're so exhausted by the end!

FUNDING

Do you have a great project and need funds to make it happen?

You can find more information on available grants on the Brunswick Valley Landcare website including a calendar of all grants expected to be available during 2016. There are also some handy tips on how to be successful with grant applications. Below is a summary of grants which are currently accepting applications and ones that are anticipated to open within the next month.

<http://brunswickvalleylandcare.org.au/funding/>

CLOSING SOON: Yates Junior Landcare Grants 2016

DESIGN AND BE INSPIRED IN THE GARDEN

Would your group or school like the chance to design your dream educational garden and receive a grant to make it a reality?

Yates and Junior Landcare have teamed up to encourage young people to get creative in the garden. Groups are invited to submit a design of their dream educational garden within their grounds or community, for the opportunity to win one of 12 grants valued at \$2,000!

Applications close **15th August (9.00am AEST)** [Find out more here](#)

Suitable for schools and preschools



ANZ Seeds of Renewal Grants

The ANZ Seeds of Renewal Program distributes grants of up to \$15,000 for education and employment initiatives that support local economies in rural, regional and remote areas, with consideration given to projects that benefit communities with a population of fewer than 15,000 people.

This year Lenovo is again supporting the program, with donations of laptops and tablets to eligible community projects. This means community groups can apply for a funding grant or for IT equipment. Applications close 5pm on Friday, **26th August 2016**. [Find out more here.](#)

Suitable for community groups who require IT equipment

DPI Habitat Action Grants

NSW Department of Primary Industries – Fisheries Habitat Action Grants will open on Friday 5 August. Small grants up to \$2,000 and large grants up to \$40,000 are available and need matching funds (in-kind or cash). Applications including recreational fishers as part of the project will be looked on favourably. Projects should improve fish habitat in your area - weeding, revegetation, stock management, erosion control works, fish passage improvements, resnagging.

Applications close on **30th September** at 5pm. <http://www.dpi.nsw.gov.au/fishing/habitat/rehabilitating/ahr-grants-program>

Suitable for riparian projects



Grants that are opening soon

Protecting our Places grants

The aim of the Protecting our Places program is to protect land that is culturally significant to Aboriginal people and to support education projects about the environment and its importance in Aboriginal life.

It is envisaged that the next call for applications will be in late 2015/early 2016. Keep an eye on the page below for updates regarding this years grants. <http://www.environment.nsw.gov.au/grants/pop.htm>

Coles Junior Landcare Garden Grants

<http://www.juniorlandcare.com.au/grants-2/coles-grant>

Suitable for schools and preschools

The Jemena Live. Grow. Explore. Grants

<http://www.juniorlandcare.com.au/jemenagrants>

Suitable for schools and preschools

20 Million Trees Programme Grant Round 2

Round Three of the 20 Million Trees Programme will probably open in early August. The Programme will support projects that involve the community in re-establishing native vegetation, provide habitat to support our threatened species, sequester carbon from the atmosphere and help to create greener spaces to improve the liveability of Australia's cities and towns. Priority for Round Two will be given to projects with positive outcomes for threatened species and threatened ecological communities listed under the EPBC Act.

More info on past projects and other useful info for planning can be found at

<http://www.nrm.gov.au/national/20-million-trees>

Suitable for tree planting projects



Environmental Restoration and Rehabilitation Grants

Applications usually open in August. The aim of the Restoration and Rehabilitation program is to facilitate projects run by community organisations and government entities working to prevent or reduce environmental degradation and pollution, restore habitats and improve the capacity of the community to protect important ecosystems and species. Grants of between \$5,000 and \$100,000 are available. More info on past projects and other useful info for planning can be found at

<http://www.environment.nsw.gov.au/grants/restoration.htm>



Weed of the Month

This month's weed of the month is Awabuki Sweet Viburnum *Viburnum odoratissimum awabuki*.

Bangalow Land and Rivercare reported to me this week that they are encountering this plant all along Byron Creek. It has been reported by bush regenerators as a problem from SE QLD to Coffs Harbour at this stage. *Viburnum odoratissimum awabuki* is sold widely as a hedging plant so it's may be impossible to stop but we wondered if it is beings reported in other parts of the shire.



It is coming up as seedlings but it also appears to be layering everywhere it touches the ground. We recently found one that was over 3m with up to 20 rooted branches around it. Another we had killed last year had rooted from a piece on the ground.

The Awabuki Sweet Viburnum has a common cultivar known as 'Emerald Lustre'. It can sometimes be confused with the Sweet Viburnum (*Viburnum odoratissimum odoratissimum*) that is currently non-invasive.

The Awabuki Sweet viburnum reproduces by seed that is dispersed by birds and other animals eating the fruit. Due to

this, the weed is fast-growing, readily spreads and has the potential to outcompete native plant species, reducing native habitat.

This species can be a weed around waterway edges, disturbed bushland and rainforest gaps, and margins in sub-tropical, tropical and warmer temperate regions.

A shrub or small tree usually growing 1-4m tall with large glossy green paired leaves with leathery texture. Leaf blades are 10-20cm long and 4-9cm wide with irregularly toothed to margins. Small white flowers arranged in large branched clusters, 6-13cm long at branch tips. Small fleshy egg-

shaped fruit (8mm long and 5-6mm wide) turn from green to red as they mature.

Similar Species: Can be confused with *Viburnum odoratissimum odoratissimum* which has smaller dull green leaves that are not thick and leathery, and is currently non-invasive.

Native Replacement: Any locally native *Acmena*, *Grevillea*, *Leptospermum*, *Pandorea*, etc.

Many of these new and emerging weeds are still being sold by the big garden shop chains and commercial nurseries but if you would like to be informed about what you purchase a good place to look is [Weed Watch](#)

Image and description credit Technigro.



WORKING BEES - why not get out and get involved in one of our local groups?

For all Landcare Working Bees please wear protective clothing - long pants, long-sleeved shirt, closed-in shoes, hat, gloves and bring water, sunscreen, and insect repellent. **Please always contact the groups co-ordinators before attending a working bee as plans do change!**

Brunswick Heads Dunecare

WHEN: 4th Sunday of the month 8:00am – 11:00am
WHERE: Meet in North Beach Car Park
CONTACT: Jordan Moore brunswickheadsdunecare@gmail.com 0413 962 468 txt mess pls

East Yallakool Landcare, Ocean Shores

WHEN: each Wednesday 8:00am – 11:00 am
WHERE: Inderwong Avenue, Ocean Shores (adjacent to the footbridge)
CONTACT: David Kemp dnkemp77@gmail.com 0427 650 861

Green and Clean Awareness Team, Byron Bay

WHEN: 3rd Sunday of the month 9:00am
WHERE: Meet Main Beach, Byron Bay
CONTACT: Veda Turner vedaturner@gmail.com 0427 857 991

Heritage Park Landcare, Mullumbimby

WHEN: alternate Saturdays 9:00am – 11:00 am
WHERE: Heritage Park, Mullumbimby
CONTACT: Diana Hughes bromspot@gmail.com

Jinangong Landcare, Ocean Shores

WHEN: 1st Sunday of the month
WHERE: The Tunnel Road, Ocean Shores
CONTACT: Ian Parer ianparer@hotmail.com

Lower Mullum Creek Landcare, Mullumbimby

WHEN: 2nd Sunday of the month
WHERE: find out from Rita de Heer
CONTACT: Rita de Heer 02 6684 1495 rdeheer1@bigpond.com

South New Brighton Dunecare

WHEN: 1st Friday of the month 1:30pm - 4:30pm
WHERE: Meet at southern end of the Esplanade at the Strand beach access point.
CONTACT: Robyn Bolden robyn.bolden@australis.net 6680 1970

Suffolk Park Dunecare

WHEN: 1st Saturday of the month
CONTACT: Helen Brown hellyh@bigpond.com 6685 4964

Tyagarah Landcare

WHEN: Each Thursday 9:00am – 11:00am
WHERE: 23 Prestons Lane, Tyagarah
CONTACT: Bela Allen bela_allen@yahoo.com 6684 7113

LINKS

- Arakwal <http://arakwal.com.au/>
 - Border Rangers Alliance <http://www.greateasternranges.org.au/border-ranges/overview/overview>
 - Bangalow River and Landcare <http://www.bangalowlandcare.org.au/>
 - Big Scrub Landcare <https://www.bigscrubrainforest.org.au/>
 - Brunswick Valley Landcare <http://www.brunswickvalleylandcare.org.au/>
 - Byron Bird Buddies <http://www.byronbirdbuddies.com.au/>
 - Byron Community College <http://www.byroncollege.org.au/>
 - Byron Shire Council <http://www.byron.nsw.gov.au/>
 - EnviTE www.envite.org.au
 - Environmental Trust <http://www.environment.nsw.gov.au/grants/envtrust.htm>
 - Ewingsdale Locality Group (BVL) <http://ewingsdale.org.au/#/landcare/4532495308>
 - Far North Coast Weeds <http://fncw.nsw.gov.au/>
 - Friends of the Koala www.friendsofthekoala.org
 - North Coast Local Land Services <http://northcoast.lls.nsw.gov.au/>
 - Northern Landcare Support Services <http://www.nlss.com.au/>
 - Mullumbimby Community Gardens <http://mullumcommunitygarden.wordpress.com/>
 - North Coast nature <http://www.northcoastnature.org.au/>
 - Richmond Landcare Inc. <http://www.richmondlandcare.org/>
 - Soilcare <http://www.soilcare.org>
 - Suffolk Park Locality Group (BVL) www.landcare.nsw.gov.au/groups/suffolk-park-dunecare-group
 - Tweed Landcare Inc. <http://www.tweedlandcare.org.au/>
 - Wilson's Creek Huonbrook Landcare <http://wilsonscreeklandcare.mullum.com.au/>
 - Wetlandcare Australia <http://www.wetlandcare.com.au/index.php>
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For information about Landcare or other natural resource issues in Byron shire
please contact

Landcare Community Support Officer

Alison Ratcliffe 66267028 (Tuesday and Wednesday)

email: alison.ratcliffe@byron.nsw.gov.au



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